

# ADAPTIVE RECEIVER SYSTEM THAT ADJUSTS TO THE LEVEL OF INTERFERING SIGNALS

## ABSTRACT OF THE INVENTION

5 Adaptive receiver system that adjusts to the level of interfering signals. An adaptive system is provided for use with a radio receiver to adapt to interfering signals associated with a received RF signal. The radio receiver includes a LNA to receive the RF signal and produce an amplified signal that is coupled to a down-converting mixer that produces a mixer output. A peak detector is coupled to receive the mixer output to  
10 produce a peak signal. An integrator is coupled to the peak detector to receive the peak signal and produce an integrated signal and a mixer is coupled to receive the integrated signal and a transmit power indicator to produce a current control signal that is coupled to the LNA. The current control signal is used to control a bias current of the LNA, so that cross modulation associated with the received RF signal is reduced

15